

REMARKS

The present application was filed on December 15, 2003, with claims 1-13, all of which remain pending. Claims 1, 5 and 10 are the independent claims.

Claim 7 is objected to because of informalities.

Claims 1-3, 5-7 and 10-12 are rejected under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent Publication No. 2002/0065656 (hereinafter "Reding").

Claims 4, 8, 9 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over Reding in view of U.S. Patent No. 6,501,832 (hereinafter "Saylor").

Claims 7 and 12 have been amended without prejudice solely to correct typographical errors.

With regard to the objections to claim 7, Applicants have amended claim 7 so as to replace "storage is said" with "storage in said," as helpfully suggested by the Examiner. The Examiner also objects to claim 7 on the grounds that "'operative to' constitutes intended use which itself has not been recited." Applicants respectfully traverse this objection on the grounds that functional language does not, in and of itself, render a claim improper. See, e.g., *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). Rather, a functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. See, e.g., *In Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc.*, 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006 (Fed. Cir. 2004) ("In the absence of modifiers, general descriptive terms are typically construed as having their full meaning.") See generally MPEP 2173.05(g).

Claim 1 is directed to a system for generating voiceprints, comprising a first specification for designating a first set of data to be used in producing a first voiceprint; stored voice recordings annotated with metadata describing characteristics associated with said stored voice recordings; and a voice print generator for receiving said first specification and using said first set of data to retrieve selected voice recordings from said stored voice recordings, and further for generating said first voiceprint using said selected voice recordings.

It is important to note that claim 1 specifies that a voice print generator receives a first specification designating a first set of data and then uses the first set of data designated by the

received first specification to retrieve selected voice recordings from stored voice recordings annotated with metadata describing characteristics associated with said stored voice recordings. In an illustrative embodiment described in paragraph [0015] on pages 4-5 of the present specification, an application may specify a description of the data that should go into creating the caller's voiceprint on the fly and may further specify the particular verification speech engine and associated parameters that should be utilized in creating this voiceprint.

In formulating the present rejection of claim 1, the Examiner apparently contends that voice data 410, shown in FIG. 4 of Reding, suggests the recited first specification for designating a first set of data to be used in producing a first voiceprint. Applicants respectfully disagree and note that paragraph [0059] of Reding describes speech data 410 as including extracted feature information 412, e.g., feature vectors, and digital recordings of speech 414. The feature information 412 and/or recordings 414 represent speech information which can be transmitted via the Internet for use in model training and/or speech recognition operations. Thus, rather than being a first specification for designating a first set of data to be used in producing a first voiceprint, speech data 410 is itself a set of data which can be used in model training and/or speech recognition operations.

Moreover, nowhere does Reding teach or suggest the claimed arrangement wherein a voice print generator receives a first specification designating a first set of data and then uses the first set of data designated by the received first specification to retrieve selected voice recordings from stored voice recordings annotated with metadata describing characteristics associated with said stored voice recordings. Rather, the conventional arrangements taught by Reding fail to reach the advantages associated with illustrative embodiments of the system recited in claim 1, as described in the present specification at, for example, paragraph [0007] on page 3.

Independent claims 5 and 10 are believed patentable for at least the reasons identified above with regard to independent claim 1. Moreover, each of these claims further specifies that the recited specification is received from an application, which is similarly neither taught nor suggested by Reding. Indeed, it should be noted that FIG. 4 of Reding, upon which the Examiner relies, is described as illustrating exemplary contents of memory 302, which in turn is a component of computer system 50 which may be used at one or more customer premises rather than within speech

processing facility 18. See Reding at, for example, paragraphs [0044], [0053] and [0058].

Dependent claims 2-4, 6-9 and 11-13 are believed patentable for at least the reasons identified above with regard to their respective independent claims. Moreover, at least one of these claims is believed to recite separately patentable subject matter.

For example, dependent claim 2 recites a limitation wherein the first specification includes a designation of the specific speech engine to be used in producing said first voiceprint. As noted above with regard to claim 1, the first specification is received by the voiceprint generator. In rejecting dependent claim 2, the Examiner alleges that the disclosure of Reding at [0025] that “‘updated models are returned to the speech recognition systems along with, in some cases, new speech recognition engine software’ teaches using a particular application or specific speech engine.”

Applicants respectfully note that Reding in fact teaches away from the limitations of claim 2 wherein the voice print generator receives a first specification including a designation of the specific speech engine to be used in producing said first voiceprint. Specifically, paragraph [0025] of Reding teaches that a centralized speech processing facility, in addition to generating new speech recognition models, may be operative to generate updated models which may be retuned to distributed speech recognition engines. In other words, rather than teaching an arrangement wherein a voice print generator receives a first specification including a designation of the specific speech engine to be used in producing the first voiceprint, the relied-upon portion of Reding teaches a technique wherein new speech recognition engine software may be transmitted from a centralized speech processing facility along with updated models.

Dependent claims 6 and 11 contain limitations similar to those of claim 2 and are thus believed patentable for at least the reasons identified above with regard to claim 2.

With regard to the rejections of claims 4, 8, 9 and 13, Applicants respectfully submit that Saylor is not analogous prior art and therefore cannot form the basis for a rejection under 35 U.S.C. §103. See, e.g., MPEP § 2141.01(a); *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992) (“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.”); *In re Clay*, 966 F.2d

656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) (“A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.”).

Whereas, as described in the present specification at [0001], illustrative embodiments of the present invention relate generally to the field of speaker authentication and more particularly to a system and method for generating on-demand voiceprints using voice data descriptions, Saylor is directed to a system and method for registering voice codes for use in accessing stored content via telephone (see Saylor at, for example, column 1, lines 13-21). In other words, Saylor is completely unrelated to speaker authentication, much less generating on-demand voiceprints using voice data descriptions. Accordingly, Applicants respectfully submit that Saylor is neither in the field of Applicants’ endeavor nor logically would have commended itself to an inventor’s attention in considering his problem, much less have been obvious candidate for combination with Reding.

In view of the foregoing, claims 1-13 as amended are believed to be in condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joseph B. Ryan", with a long horizontal flourish extending to the right.

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